

Amendment to the Specification

Please amend paragraph 0035 of the Specification as follows:

[0035] As long as packet traffic is transmitted intra-PLC, stations can identify a packet's source and destination stations by inspecting the ConnectionID field in the PLC MAC Header, as shown in Fig. 4, and then referencing the connection table. However, data packets which are bridged onto the PLC LAN from non-PLC LANs must be interworked by the bridge device. The interworking of packets from a non-PLC LAN by a bridge device includes the re-addressing of the packet by replacing the source 48-bit MAC address and the ~~designation~~ destination 48-bit MAC address with the ConnectionID, which is contained in the ConnectionID field in the MAC Header. Likewise, data packets that are transmitted from the PLC-LAN onto a non-PLC LAN across a bridge device, must be interworked. In this case, the interworking includes removing the PLC MAC Header and forming the LAN MAC Header containing the source and destination 48-bit MAC addresses.